

HyProGen® GS-6 Extr 1.6

0100

Page 1

Substance key: SC0000105579

Revision Date: 07/21/2015

Version : 1 - 3 / USA

Date of printing :01/11/2016

SECTION 1. IDENTIFICATION

Identification of the company:

Clariant Corporation
4000 Monroe Road
Charlotte, NC, 28205
Telephone No.: +1 704 331 7000

Information of the substance/preparation:

Product Safety 1-704-331-7710

Emergency tel. number: +1 800-424-9300 CHEMTREC**Trade name:**

HyProGen® GS-6 Extr 1.6 0100

Material number:

246518

Chemical family:

Mixture of copper oxide and manganese oxide

Primary product use:

Catalyst

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Acute toxicity (Oral) : Category 4

Acute toxicity (Inhalation) : Category 4

Specific target organ toxicity
- repeated exposure : Category 2**GHS Label element**

Hazard pictograms



Signal word : Warning

Hazard statements : H302 + H332 Harmful if swallowed or if inhaled
H373 May cause damage to organs through prolonged or repeated exposure.

Precautionary statements : **Prevention:**
P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
Response:
P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell. Rinse mouth.
P304 + P340 + P312 IF INHALED: Remove victim to fresh air

Substance key: SC0000105579

Revision Date: 07/21/2015

Version : 1 - 3 / USA

Date of printing :01/11/2016

and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell.
P314 Get medical advice/ attention if you feel unwell.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards

The substance does not meet the criteria for PBT or vPvB substance.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature

- Mixture of copper oxide and manganese oxide

Hazardous components

Chemical Name	CAS-No.	Concentration (%)
Manganese dioxide	1313-13-9	50 - 100
Copper oxide	1317-38-0	< 25

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

SECTION 4. FIRST AID MEASURES

General advice

- : Take off all contaminated clothing immediately.
Show this safety data sheet to the doctor in attendance.

If inhaled

- : INHALATION: If exposed to excessive levels of dust or fumes, remove to fresh air and get medical attention. Get medical attention if cough and other symptoms develop.
Remove to fresh air.

In case of skin contact

- : Avoid contact with skin.
Wash area with mild soap and copious amounts of water.
Remove contaminated clothing and shoes.
Wash clothing before reuse.
If skin irritation occurs: Get medical advice/ attention.

In case of eye contact

- : Do not rub affected area.
Rinse immediately with plenty of lukewarm water, also under the eyelids, for at least 15 minutes.
Obtain medical attention.

If swallowed

- : Do NOT induce vomiting.
Call your local Poison Control Center (In the U.S. call 1-800-222-1222).

Most important symptoms and effects, both acute and delayed

- : The possible symptoms known are those derived from the labelling (see section 2).
No additional symptoms are known.

Notes to physician

- : Treat symptomatically.

Substance key: SC0000105579

Revision Date: 07/21/2015

Version : 1 - 3 / USA

Date of printing :01/11/2016

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : The product itself does not burn.
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Unsuitable extinguishing media : No information available.
- Specific hazards during firefighting : Keep away from combustible material.
- Used catalyst may have different hazards or properties than the original product.
This MSDS does not apply to the used catalyst.
Contact Technical Services at 502-634-7200 for more information.
- Further information : Wear full protective clothing and NIOSH/MSHA-approved positive pressure, self-contained breathing apparatus.
- Special protective equipment for firefighters : No special precautions required.

SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Ensure adequate ventilation.
Avoid dust formation.
Use personal protective equipment.
Avoid contact with skin, eyes and clothing.
Material should be swept up or vacuumed, using ventilation to control the level of airborne dust. Avoid using compressed air or any method that creates airborne dust. If cleanup may create airborne dust, personnel should wear eye, skin, and respiratory protection.
Refer to Section 8 for more information.
- Environmental precautions : Do not flush into surface water or sanitary sewer system.
- Methods and materials for containment and cleaning up : Take up uncontaminated material and pass on for further processing.
Take up contaminated material by mechanical means, load into clean containers, and dispose of in accordance with legal regulations.

SECTION 7. HANDLING AND STORAGE

SAFETY DATA SHEET



HyProGen® GS-6 Extr 1.6

0100

Page 4

Substance key: SC0000105579

Revision Date: 07/21/2015

Version : 1 - 3 / USA

Date of printing :01/11/2016

- | | |
|---|--|
| Advice on protection against fire and explosion | : In case of inappropriate handling, spent catalyst can be self-heating when in contact with air. |
| Advice on safe handling | : Avoid contact with skin, eyes and clothing.
Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
Minimize dust generation and accumulation. |
| Conditions for safe storage | : Keep tightly closed in a dry and cool place. |
| Technical measures/Precautions | : Keep container tightly closed and dry.

Keep container tightly closed.
Keep container dry. |
| Materials to avoid | : No materials to be especially mentioned. |

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

- | | |
|-----------------------------|---|
| Engineering measures | : Use ventilation adequate to keep exposures below recommended exposure limits. See the safety datasheet. |
|-----------------------------|---|

Personal protective equipment

- | | |
|----------------------------|---|
| Respiratory protection | : Wear NIOSH approved particulate filtering respirator rated N, R, or P95 or 100 or equivalent in the absence of proper environmental control. Type of respirator depends on level of exposure. |
| Hand protection
Remarks | : butyl-rubber PVC Viton (R) Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. |
| Eye protection | : Follow facility guidelines in the absence of dusts.
Tightly fitting safety goggles
If respiratory protection is needed under dusty conditions, a full facepiece respirator is recommended to provide both eye and respiratory protection. |
| Skin and body protection | : Wear protective clothing, including long sleeves and gloves, to prevent skin contact.
Thoroughly wash clothing before reuse. |

SAFETY DATA SHEET



HyProGen® GS-6 Extr 1.6

0100

Page 5

Substance key: SC0000105579

Revision Date: 07/21/2015

Version : 1 - 3 / USA

Date of printing :01/11/2016

Hygiene measures : Keep working clothes separately.
Keep away from food, drink and animal feeding stuffs.
Wash hands before breaks and immediately after handling the product.
Preventive skin protection (protective ointment for the skin)

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : solid

Colour : black

Odour : none

Odour Threshold : not determined

Boiling point : not determined

Flash point : Not applicable

Evaporation rate : Not applicable

Flammability (solid, gas) : not determined

Upper explosion limit : Not applicable

Lower explosion limit : Not applicable

Vapour pressure :
Not applicable

Relative vapour density : Not applicable

Density : not determined

Bulk density : 650 kg/m³

Solubility(ies)
Water solubility : insoluble

Partition coefficient: n-octanol/water : not determined

Auto-ignition temperature : not determined

Decomposition temperature : no data available

Viscosity
Viscosity, dynamic : Not applicable

Viscosity, kinematic : Not applicable

HyProGen® GS-6 Extr 1.6

0100

Page 6

Substance key: SC0000105579

Revision Date: 07/21/2015

Version : 1 - 3 / USA

Date of printing :01/11/2016

SECTION 10. STABILITY AND REACTIVITY

Reactivity	: Stable under recommended storage conditions.
Chemical stability	: The product is chemically stable.
Possibility of hazardous reactions	: None known.
Conditions to avoid	: None known.
Incompatible materials	: Keep away from light oxidizable substances.
Hazardous decomposition products	: No decomposition if stored and applied as directed.

SECTION 11. TOXICOLOGICAL INFORMATION**Information on likely routes of exposure**

Eye contact
Skin contact
Ingestion
Inhalation

Acute toxicity**Product:**

Acute dermal toxicity : Remarks: no data available

Components:**Manganese dioxide:**

Acute oral toxicity : Remarks: Test data for the substance are not available.

Copper oxide:

Acute oral toxicity : LD50 (Rat): > 2,000 mg/kg
Method: OECD Test Guideline 423

Acute dermal toxicity : LD50 (Rat): > 2,000 mg/kg
Method: OECD Test Guideline 402

Skin corrosion/irritation**Product:**

Remarks: no data available

Components:**Copper oxide:**

Species: Rabbit
Method: OECD Test Guideline 404
Result: No skin irritation

SAFETY DATA SHEET

HyProGen® GS-6 Extr 1.6

0100

Page 7

Substance key: SC0000105579

Revision Date: 07/21/2015

Version : 1 - 3 / USA

Date of printing :01/11/2016

Serious eye damage/eye irritation

Product:

Remarks: no data available

Components:

Copper oxide:

Species: Rabbit

Result: No eye irritation

Method: OECD Test Guideline 405

Respiratory or skin sensitisation

Product:

Remarks: no data available

Components:

Copper oxide:

Species: Guinea pig

Method: OECD Test Guideline 406

Result: non-sensitizing

Carcinogenicity

IARC

Not listed

OSHA

Not listed

NTP

Not listed

Experience with human exposure

Product:

General Information : The possible symptoms known are those derived from the labelling (see section 2).

Further information

Product:

Remarks: No data is available on the product itself.

Handle in accordance with good industrial hygiene and safety practice.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Toxicity to fish

:

Remarks: no data available

SAFETY DATA SHEET



HyProGen® GS-6 Extr 1.6

0100

Page 8

Substance key: SC0000105579

Revision Date: 07/21/2015

Version : 1 - 3 / USA

Date of printing :01/11/2016

Components:

Manganese dioxide:

Toxicity to fish : Remarks: Test data for the substance are not available.

Copper oxide:

Toxicity to fish : Remarks: For this material no values were determined. The classification is based on read across data analogous substances.

Persistence and degradability

Product:

Biodegradability : Remarks: no data available

Components:

Manganese dioxide:

Biodegradability : Remarks: The methods for determining biodegradability are not applicable to inorganic substances.

Copper oxide:

Biodegradability : Remarks: The methods for determining biodegradability are not applicable to inorganic substances.

Bioaccumulative potential

Product:

Bioaccumulation : Remarks: no data available

Components:

Manganese dioxide:

Bioaccumulation : Remarks: Test data for the substance are not available.

Copper oxide:

Bioaccumulation : Remarks: Not applicable

Mobility in soil

Product:

Distribution among environmental compartments : Remarks: no data available

Components:

Manganese dioxide:

Distribution among environmental compartments : Remarks: Test data for the substance are not available.

Copper oxide:

Distribution among environmental compartments : Remarks: After release, adsorbs onto soil.

SAFETY DATA SHEET



HyProGen® GS-6 Extr 1.6

0100

Page 9

Substance key: SC0000105579

Revision Date: 07/21/2015

Version : 1 - 3 / USA

Date of printing :01/11/2016

Other adverse effects

Components:

Manganese dioxide:

Results of PBT and vPvB assessment : Remarks: Not relevant for inorganic substances

Additional ecological information : slightly water endangering

Components:

Copper oxide:

Results of PBT and vPvB assessment : Remarks: Not relevant for inorganic substances

Additional ecological information : slightly water endangering

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

RCRA - Resource Conservation and Recovery Act : Although not a RCRA hazardous waste, check with local and state regulations for proper disposal.

Waste Code : NONE

Waste from residues : Dispose of this product in accordance with applicable local, state and federal regulations. Recover metal components by reprocessing whenever possible.

Contaminated packaging : Dispose of as unused product.

SECTION 14. TRANSPORT INFORMATION

DOT not restricted

IATA not restricted

IMDG not restricted

SECTION 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SAFETY DATA SHEET



HyProGen® GS-6 Extr 1.6

0100

Page 10

Substance key: SC0000105579

Revision Date: 07/21/2015

Version : 1 - 3 / USA

Date of printing :01/11/2016

SARA 311/312 Hazards	: Acute Health Hazard Chronic Health Hazard		
SARA 302	: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.		
SARA 313	: This product contains the chemical or chemicals listed below which are subject to the supplier notification requirements of Section 313 of the Superfund Amendments and Reauthorization Act of 1986 ("SARA") and the requirements of 40 CFR Part 372:		
	Manganese Compound	Not Assigned	100 %
	Manganese	7439-96-5	63 %
	Copper Compound	Not Assigned	25 %
	Copper	7440-50-8	20 %

Clean Water Act

Contains the following Priority Pollutant(s) at concentrations greater than 0.1%:, Copper

The components of this product are reported in the following inventories:

TSCA : All components of this product are listed or excluded from listing on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) Inventory.

Inventories

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TCSI (Taiwan), TSCA (USA)

SECTION 16. OTHER INFORMATION

Further information

SAFETY DATA SHEET

HyProGen® GS-6 Extr 1.6

0100

Page 11

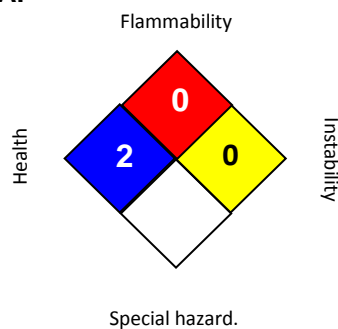
Substance key: SC0000105579

Revision Date: 07/21/2015

Version : 1 - 3 / USA

Date of printing :01/11/2016

NFPA:



Revision Date : 07/21/2015

This information is supplied under the OSHA Hazard Communication Standard, 29 CFR 1910.1200, and is offered in good faith based on data available to us that we believe to be true and accurate. The recommended industrial hygiene and safe handling procedures are believed to be generally applicable to the material. However, each user should review these recommendations in the specific context of the intended use and determine whether they are appropriate for that use. No warranty, express or implied, is made regarding the accuracy of this data, the hazards connected with the use of the material, or the results to be obtained from the use thereof. We assume no responsibility for damage or injury from the use of the product described herein. Data provided here are typical and not intended for use as product specifications.

US / USA